Determination of Public Land (Rangeland) Health for 64087 KING PLACE WEST

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within the King Place West allotment #64087 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered and Special Status Species standard. There are no public land riparian areas on this allotment, therefore this standard was not addressed.

/s/ T. R. KREAGER	07/22/2004
Assistant Field Manager	Date

Standards of Public Land Health
Evaluation of 64087 KING PLACE WEST Allotment
[01/20/2004]

The Roswell Field Office conducted rangeland health assessments at one study site within the King Place West Allotment #64087. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64087-IDSU-A170 (*)	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for the public land on the King West Place allotment #64087. Ten of these assessed soil site stability, 11 assessed hydrologic function and 13 assessed biotic integrity. These qualitaive assessments in conjunction with quantitative information gathered from previous data collected on one location within the allotment were utilized to assess the rangeland health of the public land. This allotment is in the "C" (custodial) category because of the small amount of public land present.

The dry conditions occuring over the last several years have impacted this allotment and the surrounding area. This site classifies as an SD-3 loamy ecological site on 40 acres or 18 hectares. This isolated parcel is a Reakor soil phase which normally occurs on uplands west of the Pecos River. The majority of indicators assessed rated None to Slight to Slight to Moderate. The site is in the transition zone between upland and bottomland and encompasses both also. The vegetation is indicative of upland with catclaw (Acacia spp.) on the slopes, creosote (Larrea tridentata), mesquite (Prosopis glandulosa), prickly pear (Opuntia spp.), burrograss (Scleropogon brevifolius) and some black grama (Bouteloua eriopoda). On the bottomland side there is tobosa (Pleuraphis mutica), saltcedar (Tamarix chinensis), vine mesquite (Panicum obtusum) and other less dominant species. The last monitoring done on this site was 1991, so the appropriate information is not entirely representative. The present qualitative evaluation is the major emphasis.The site is estimated to produce 500lbs/ac or kg/ha presently, averaging upland and bottomland. The bottomland vegetation displays significantly more biomass as the runoff from previous storm events has settled there. However the upland also is producing amounts of grass and shrubs that are higher than what the dry conditions have indicated. There is evidence of some conservative livestock use, especially on the bottoms. Saltcedar has encroached on the drainages east of the upland area and grades to a more mesquite infested area with

higher elevation. The invasive plants indicator rates at Moderate to Extreme as a result. All other indicators show slight departures from the ESD with Slight to Moderate ratings dominating.

Wildlife - Evaluation of the integrity of the biotic community considered several indicators as attribute indices for the area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of the ecological site description, such as annual production and invasive plants, as discussed above. Specifically, only one biotic indicator fell within the Moderate rating, invasive plants. Considering the bottomland nature of the area of interest, this area can be expected to exhibit saltcedar invasion.

In addition to the standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in this evaluation. Wildlife Habitat and Population indicators rate Slight to Moderate, primarily for desert mule deer and a variety of non-game terrestrial species, including raptors and migratory birds which may utilize the Pecos River corridor. The 40-acre isolated parcel is adjacent to several developments, including roads, a mineral material pit, and irrigated croplands. Diverse habitat area for a variety of terrestrial wildlife, including an old truck body used by woodrats. Habitat use is moderated by saltcedar invasion and land use. With respect to Special Status Species, none are known to occur in the area of interest at this time and the Habitat and Population indicators are, therefore, rated None to Slight. However, the Pecos River serves as corridor for a variety of avifauna, some of which are species of concern for the State of NM.

Hydrology - Pasture IDSU - All other indicators rated as none to slight or slight to moderate which shows a healthy ecological condition. Sand and gravel deposits of Quaternary alluvial deposits outcrop in the area.

It is the professional opinion of the Assessment Team, that the public land within the King Place West allotment meets the Upland and Biotic standards. See site notes and recommendations for any additional information regarding this ecological site.

The (*) indicates that the assessment had one or more indicator(s) rated moderate/extreme or extreme. These indicators are:

- Invasive Plants

These indicators by themselves are not enough to rate the site as not meeting a standard but may warrant future monitoring.

Recommendations: If this site, which is situated on an isolated 40 acre or 18 hectare parcel is to be managed in the future, then a more rigorous monitoring schedule should be put into effect. Thirteen years between monitoring does not represent the information

adequately to arrive at any former management decisions if needed. Future allotment inspections and data collection must be performed. Brush control may be done only as an experimenal tool to evaluate vegetative response of larger parcels. Nevertheless, saltcedar (Tamarix chinensis) must be dealt with regardless of it's location. The RMP must be reviewed to identify whether this 40 acre parcel is earmarked for disposal. Although this parcel is in an isolated tract, steps could be taken to clean up the site of trash and debris.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64087-IDSU-A170			
Legal Land Desc	NWSE 26 0140S 0260E Meridian 23	Acreage	40
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060007080 HAGERMAN		
Observers	NAVARRO/BAGGAO	Observation Date	01/20/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	ReB	Soil Taxon Name	REAKOR
Texture Class	NM666 L	Soil Phase	REAKOR
Texture Modifier	NM666 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	8.93	NOAA Growing Season Precipitation	6.47
NOAA Avg Annual Precipitation	12.74	NOAA Avg Growing Season Precipitation	10.45
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:	Loamy soil.					
S H	Bare Ground				X	

Comments:	30-40% is the current estimate.					
S H	Gullies				X	
Comments:	Drainages are stabilized.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:	Displacement on the bottoms.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:	50/50-gravelly.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Now we have mesquite, tobosa, burrograss and creosote. On the upland we have catclaw and prickly pear.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Percent litter fall within the range.					
B	Annual Production				X	

Comments:	The majority of production is in the bottoms.					
B	Invasive Plants		X			
Comments:	Mesquite (Prosopis glandulosa) common and saltcedar (Tamarix chinensis) scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:	No restrictions.					
S	Physical/Chemical/Biological Crusts					X
Comments:	Physical crusts evident.					
B	Wildlife Habitat				X	
Comments:	40-acre isolated parcel in hill breaks of Pecos Valley. Hills and small drainages with major road adjacent to parcel. Saltcedar infestation and mesquite in bottoms. Adjacent hills are gravelly. Too small to specifically assess wildlife habitat, but site is diverse and in relatively good shape other than road and nearby mineral pit. Area used by folks quite a bit.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population information at this time. Primary species of concern are a variety of small terrestrial non-game species and avifauna. Since bottoms are relatively stable, ground cover is excellent for small mammals, especially the truck body used as wood rat nesting site.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to	Moderate	Slight to Moderat	None to

			Extreme		e	Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	8	3
B	Biotic	0	1	0	7	5

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		1	0	12

Site Notes: This site is an isolated 40 acre/18 hectare parcel which may be difficult for the field office to manage. There is evidence of dumping and old abandoned vehicles. The last monitoring done on this allotment was 1991. An evaluation to possibly dispose this 40 acre parcel in the future might be the most prudent manner to approach this. Also this may be an area to conduct experimental brush control treatments to eradicate salt cedar (Tamarix chinenesis) and mesquite(Prosopis glandulosa). No livestock were observed at the time of assessment, but there were a number of hunters frequenting the area and surrounding vicinity. The site was gps'd to be entered into the study point coverage in Arcview.

Rangeland Health Assessment
Ecological Sites

Allotment 64087

T14.R26E

r042cy007nm

r042cy004nm

r042cy025nm

r042cy033nm

r042cy007nm

26

r042cy025nm

0 0.1 Miles

T14S.R26E

Public

Study Plots

Private

Study Locations

Ecological Sites

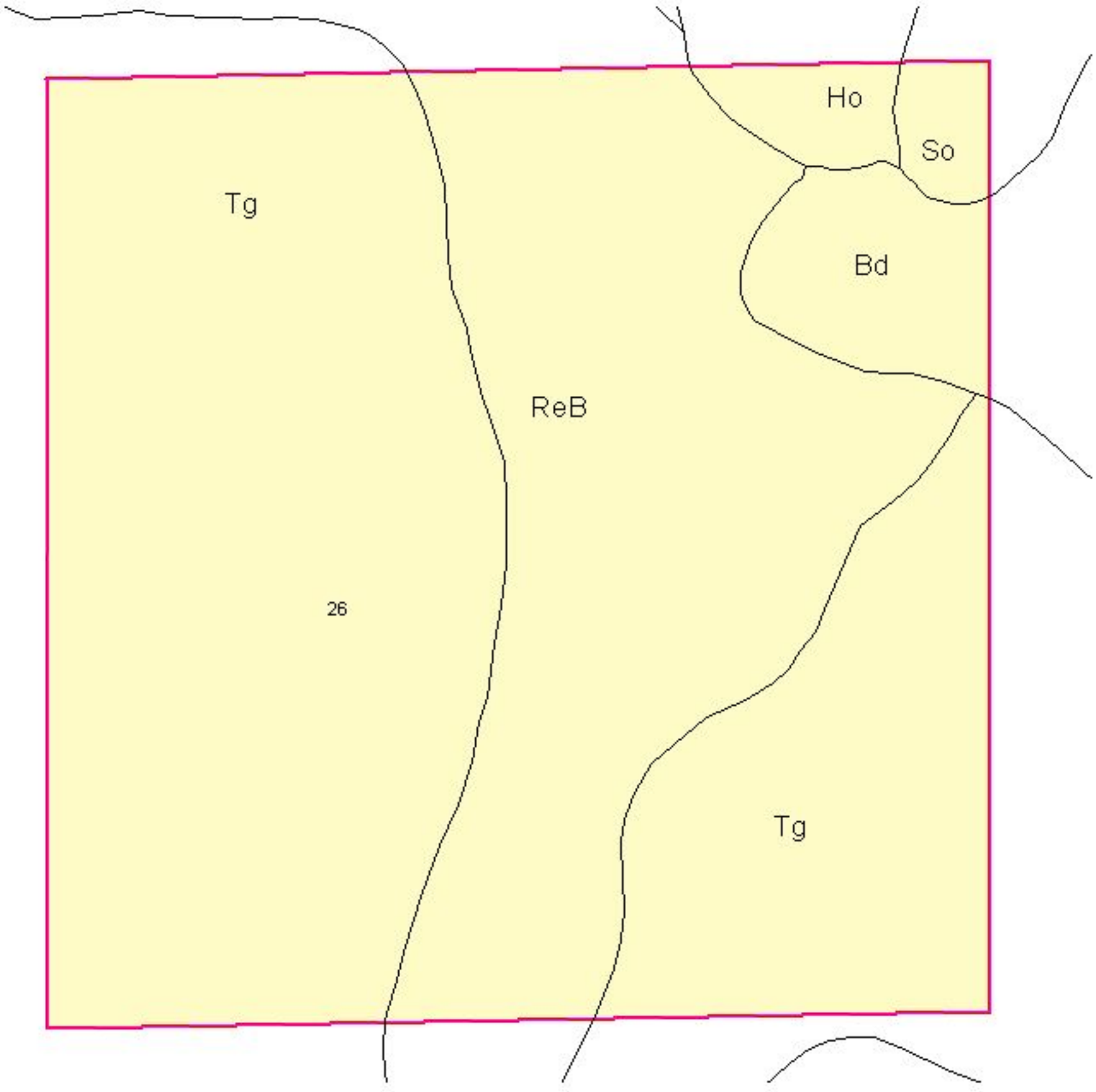
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 28, 2003.

Rangeland Health Assessment
Soil Mapping Units

Allotment 64087

T14.R26E



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Study Plots

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Allotment Boundary

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